

DECLINING TEEN PREGNANCY AND TEEN BIRTHS RATES IN ARIZONA

DESCRIPTION OF TEEN PREGNANCY:

The rate of teen pregnancy is commonly defined as the count of adolescent females who delivered a live infant, had an induced termination of pregnancy, or delivered a fetal death divided by the total number of adolescent females in a population during a given year. It is important to note that the rates of and risk for teen pregnancy are underestimates as no data are available for pregnancy ending in miscarriage. Data on pregnancy are obtained from birth and fetal death certificates and, in the case of Arizona, abortion data reported annually by hospitals, outpatient treatment centers and physicians' offices. No valid comparison is possible between the rate of teen pregnancy in Arizona and the estimated rate in the U.S.¹ However, the rate of live births delivered by teens in the U.S. is comparable to the rate in Arizona.

WHY IS TEEN PREGNANCY A PROBLEM?

According to the Centers for Disease Control and Prevention (CDC), "Babies born to teenage mothers are at elevated risk of poor birth outcomes, including higher rates of low birth weight, preterm birth, and death in infancy. The limited educational, social, and financial resources often available to teenage mothers add to their higher risk profile. A recent study found that the public costs of teenage childbearing in the U.S. are about 9.1 billion annually."²

Similar negative outcomes are associated with births delivered by adolescents in Arizona. In 2009 the rate of low birth weight (7.8 per 1,000 live births) was significantly greater for Arizona females 15-19 years old compared to mothers age 20-34 years old.³ Although teens had greater rates of preterm birth (9.5 per 1,000 live births) and infant mortality (6.7 per 1,000 live births) compared to older mothers, they were not significantly greater. While there is mixed evidence regarding prenatal care and its direct impact on prematurity and low birth weight, Arizona females age 15-19 delivering a live infant in 2009 were significantly less likely to enter prenatal care during the first trimester of pregnancy (68 percent) compared to older women delivering a live infant (81.5 percent).⁴ Arizona Medicaid (AHCCCS) was more likely to be the payer of deliveries for Arizona teens (83.4 percent) than for adult females (51.7 percent).⁵ These costs, combined with the greater rates of negative health outcomes for both the teen

¹ Arizona Bureau of Vital Statistics, Teen Pregnancy Arizona 1998-2008, 2008. Retrieved from: ttp://www.azdhs.gov/plan/report/tp/teen08/teenpregnancy2008.pdf [accessed February 3, 2010].

² Martin, J.A. et.al. 2009. Births: Final Data for 2006. *National Vital Statistics Reports*, 57,1-102.

³LBW: Chi-square =18.796 (1), p<0.0001

⁴PNC 1st Trimester: Chi-square =1051.6 (1), p<0.0001

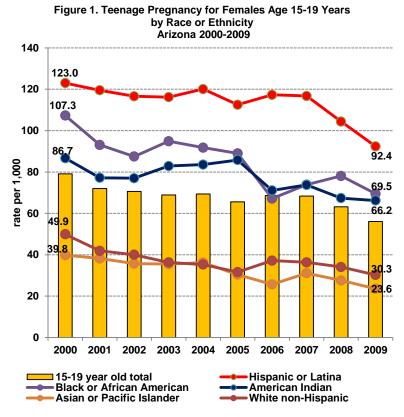
⁵ AHCCCS: Chi-square = 3815.6 (1), p<0.0001

mother and child mean the cost of childbearing per teen mother remains higher than that of adult mothers.

How is Arizona Doing? ~Teen Pregnancy

In 2009, an estimated 12,537 females under 20 years of age were pregnant, and 26.6 percent (n=2,911) of adolescents giving birth in 2009 (n=10,952) reported having had a previous pregnancy. The rate of teen pregnancy was 28.0 per 1,000 females age 19 years and younger. The risk for pregnancy increased each year of age. Females age 15-19 years accounted for the vast majority of adolescent pregnancies (n=12,381) and remain the focus of prevention programs funded by the ADHS Bureau of Women's and Children's Health Teen Pregnancy Prevention Program.

Since 2000 the teen pregnancy rate for 15-19 year old teens has declined 29 percent (79.1 to 56.1 per 1,000 females). The greatest reduction was among teens age 15-17 years (40.7 percent). Therefore, Arizona has met the Healthy Arizona 2010 goal of reducing teen pregnancy in this cohort. Although the pregnancy rate 18-19 year old teens increased in 2006 and 2007, the rate declined eight percent per year during 2008 and 2009. Hispanic or Latina teens have a significantly greater rate of pregnancy compared to the state rate (Figure 1). Nearly 55 percent of all teen pregnancies Arizona during 2009 in occurred among Hispanic or Latina females even though



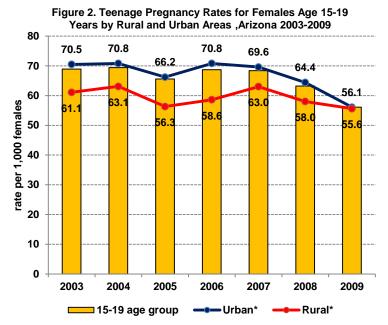
Source: Arizona Vital Statistics, 2000-2009

this group comprised only 35 percent of Arizona's 19 and younger female population. The large percentage Hispanic or Latina females under 20 years old residing in Arizona has the greatest influence on the overall teen pregnancy rate in Arizona. All races and ethnicities accounted for in the data experienced a decrease in their pregnancy rates from the baseline year of 2000, with Asian or Pacific Islander teens having the largest decrease (40 percent).

Figure 2 indicates Arizona's pregnancy teen rate bν mother's area of residence. It is evident that there was no significant difference between the rates of teen pregnancy based on rural or urban area of residence in 2009. Younger teens (15-17 years) had a greater rate of pregnancy in urban areas (29.1 per 1,000) compared to rural areas (25.9 per 1,000). However, the rate of pregnancy for older teens (18-19 years) was greater in rural areas (106.3) than in urban areas (101.4).

Α previous pregnancy is associated with increased risk additional pregnancies during adolescence. Figure 3 shows that repeat pregnancies reported among females age 15-19 delivering a live birth increased from 222.9 in 2008 to 268.9 per 1,000 live births in 2009. However, the 2009 rate was more consistent with the 2000-2007 trend, and indicates that 2008 was likely an anomaly rather than a trend.

In 2009 approximately 1-in-8 teen pregnancies in Arizona ended with abortion compared to 1-in-11 for pregnant women age 20-34 years. The abortion ratio for females 15-19 years old (138.2 per 1,000 live births) was significantly greater than



Source: Arizona Vital Statistics, 2003-2009

Age 15-19 Years, Arizona 2000-2009

281.1

294.3

284.5

282.2

278

271.4

273.4

275.2

268.8

222.9

100

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

Repeat pregnancy 15-19 years

Figure 3. Repeat Pregnancies Reported by Teen Mothers

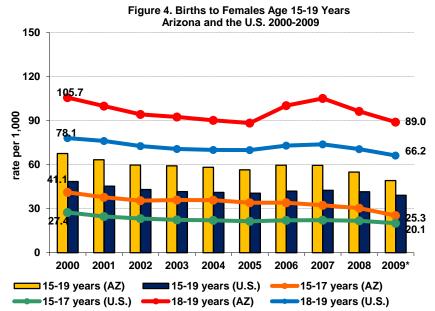
Source: Arizona Vital Statistics, 2000-2009

for females age 20 and above (101.8).6 Pregnant teens had a non-significantly greater rate of stillbirths (6.1 per 1,000 live and fetal births deaths) compared to women age 20-34 years (4.9 per 1,000). Social risk factors rather than differences biology in are implicated in greater negative pregnancy outcomes for teens relative to their older peers.⁷⁻⁸

~TEEN BIRTHS

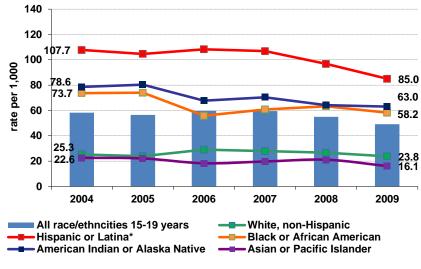
Approximately 87 percent of pregnancies for teens age 15-19 years resulted in a live birth in 2008 (n=10,820). The birth rate for Arizona teens age 15-19 has remained greater than the national rate over the past decade (Figure 4). Although the teen birth rate in Arizona declined significantly (27.4%) from 2000 to 2009, it remained more than 25 percent greater than the national rate.9 The teen birth rate difference between Arizona and the U.S. is greater among older teens (34%) than among younger teens (26%). However, the birth rate for older teens declined faster in Arizona (15 percent) than in the U.S. (10 percent) from 2008-2009.

Figure 5 shows that Hispanic



Source: Arizona Vital Statistics, 2000-2009 U.S. data preliminary for 2009*

Figure 5. Birth Rate for Females Age 15-19 Years by Race and Ethnicity, Arizona 2004-2008



Source: Arizona Vital Statistics, 2004-2008

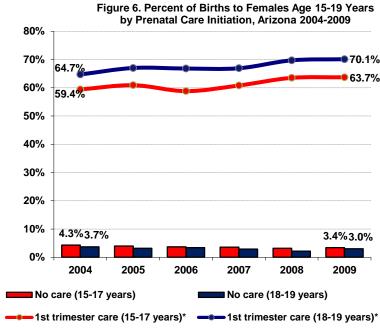
⁶ The abortion ratio is the number of reported abortions per 1,000 live births in a given year. Chi-square =136.1 (1), p<0.0001.

⁷ Committee on Adolescence, American Academy of Pediatrics (1999). Adolescent pregnancy-current trends and issues; 1998. *Pediatrics*, 103,516-520.

⁸ Maynart R.A. (1996). Kids Having Kids. A Robin Hood Foundation Special Report on the Costs of Adolescent Childbearing. *The Robin Hood Foundation*, 2-30.

or Latina teens had a significantly greater birth rate in 2009 (85.0 per 1,000 Hispanic or Latinas age 15-19 years) compared to teens of other races and ethnicities (30.8 per 1,000 teens of other race or ethnicity). ¹⁰ Similar to the disparity seen in teen pregnancy, Hispanic or Latina teens accounted for a majority of births in this age cohort (58%) even though they comprised a third of Arizona's teen population. Nevertheless, the birth rate for Hispanic or Latinas declined more than any other group in 2009 (12%), thus driving Arizona's teen birth rate to its lowest level in ten years. The birth rates also declined for all other groups declined in 2009.

The proportion of pregnant teens initiating prenatal care during the first trimester increased from 2004 to 2009 (Figure However, younger teens 15-17 vears (63.7%) were less likely to start prenatal care during the first trimester compared to older teens (70.1%). Only 68 percent of teens 15-19 years entered prenatal care at first trimester compared with 82 percent of women 20 years and older. Early prenatal care is especially important for pregnant teens as they remained more likely to have medical risk factors recorded on the birth certificate data compared with women age 20-34 years from 2004-2009. 11



Source: Arizona Vital Statistics, 2004-2009

Teens may be less aware of the physiology of pregnancy and the healthy behaviors that are required to decrease negative birth outcomes, such as consuming vitamins with folic acid and appropriate weight gain during pregnancy. Early prenatal provides education and support for behavioral change that is especially important for women with greater risks of unhealthy pregnancies.

Another important element that impacts pregnancy and birth rates is the use of contraceptives. Estimates available from Youth Risk Behavior Survey (YRBS) suggests that one-third (34.4%) of high school females were sexually active in Arizona and this rate has been consistent during survey years 2003, 2005, 2007, and 2009. Figure 7 displays use

¹⁰Chi-square = 3090.9(1), p<0.0001

¹¹Age is a confounding factor for medical risks during pregnancy for women 35 years and older. Therefore, the valid comparison involves women age 20-34 years.

of birth control measures reported by Arizona females during 2003, 2005, 2007, and 2009 survey years compared to the U.S during these survey years.

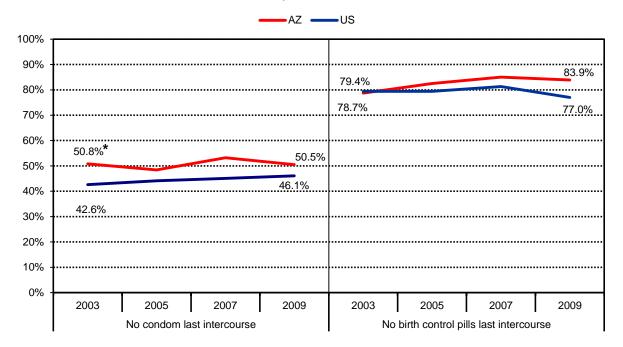


Figure 7. Use of contraception during last intercourse among 9th to 12th grade sexually active females

*Significant difference in proportions

Source: 2009 Youth Risk Behavior Survey, CDC

While there was a significant difference in the proportion of those who used condom use in 2003 in Arizona and the U.S., there are no differences in trends over time, although non-usage of contraception is slightly higher in Arizona compared to the nation. This trend therefore, suggests that declines in birth rates and/or pregnancy rates may be attributable to changes in estimation of population denominators among this cohort, especially among Latinas who are the largest ethnic minorities.

WHAT IS ARIZONA DOING?

Within the Bureau of Women and Children's Health (BWCH), the Office of Women's Health undertakes all preventative efforts for teen pregnancy. Abstinence and Comprehensive Education are the two currently funded Teenage Pregnancy Prevention Programs (TPP). In 2010 these programs, funded through state lottery dollars, provided services to over 32,000 youth 12-19 years of age, in Arizona. Abstinence and comprehensive programs are provided through classroom education and/or the

development and implementation of community based, multi-faceted youth development/service learning programs that address the problems of teen pregnancy and sexually transmitted infections among youth.

Contracts are administered through County Health Departments, private organizations, and Tribal Nations. Programs can be found in 13 of the 15 counties and in 5 Tribal Communities. In 2011, Arizona will receive federal funding through the Patient Protection and Affordable Care Act. The act authorized funding for a new teen pregnancy prevention initiative entitled the *Personal Responsibility and Education Program* (PREP), and renewed funding for the Title V State Abstinence Program.